

## Glossary

This glossary defines terms and phrases used in this manual and other related military terms. Many terms have several definitions; the most important terms tend to have the most definitions. Providing multiple definitions is intended to amplify or expand understanding of the term as it is commonly used. While a single rigid definition is useful for academic purposes, in practice people use terms in different ways. Multiple descriptions of the meaning of a word or phrase improve our grasp of the term and need never reduce our understanding. This glossary, then, is a compilation of usages; it is a record of how people have used the words most important to basic Air Force doctrine—so far.

**Aerial refueling.** See air refueling.

**Aerial siege** (archaic). An air campaign to isolate a state so as to prevent any transportation, in or out of the nation.

Major General William (“Billy”) Mitchell

**Aerospace.** Of, or pertaining to, earth’s envelope of atmosphere and the space above it; two separate entities considered as a single realm for activity in launching, guidance, and control of vehicles that will travel in both entities.

Joint Pub 1-02

**Aerospace control.** The role that encompasses all actions taken to secure and control the aerospace environment and to deny the use of that environment to the enemy.

**Aerospace control operations.** The employment of air forces, supported by ground and naval forces, as appropriate, to achieve military objectives in vital aerospace areas. Such operations include destruction of enemy aerospace and surface-to-air forces, interdiction of enemy aerospace operations, protection of vital air lines of communication, and the establishment of local military superiority in areas of air operations.

Joint Pub 1-02

**Aerospace defense.** 1. All defensive measures designed to destroy attacking enemy aircraft, missiles, and space vehicles after they

leave the earth's surface, or to nullify or reduce the effectiveness of such attacks. 2. An inclusive term encompassing air defense and space defense.

Joint Pub 1-02

A purely strategic mission; its two component tasks are integrated warning and assessment of aerospace attack, and ballistic missile defense planning and requirements development.

William E. Ramsey

**Aerospace doctrine.** A statement of officially sanctioned beliefs and warfighting principles which describe and guide the proper use of aerospace forces in military action; an accumulation of knowledge gained primarily from the study and analysis of experience.

AFM 1-1, 16 March 1984

The central beliefs about the conduct of war that guide air services in the application of military power within the third dimension above the surface of the earth.

Wing Commander Brian Kavanagh, RAAF

**Aerospace power.** Air power, in its broadest sense of air and space power. (See air power definitions.)

The projection of military force to, in, and from the air and space. Aerospace forces may be employed at any level of conflict and allow direct action to be taken against an adversary, even in those areas not accessible to surface forces.

AFM 2-25 (Draft)

**Air base operability.** The integrated capability of an installation to defend against, survive the effects of, and recover from hostile action, thus supporting effective wartime employment of air power. Air base operability provides the sustained operational capability to wage war.

AFM 11-1

The capability to survive enemy attacks and continue to generate combat sorties.

USAF Report to Congress, FY 1990

The ability to defend and regenerate air bases following attack. Its fundamental requirements include explosive ordnance

disposal, damage response, disaster preparedness, fire fighting, and runway repair.

Lieutenant Colonel Joe Boyles  
Captain Greg K. Mittelman

**Air campaign.** A connected series of operations conducted by air forces to achieve joint force objectives within a given time and area of operations.

AFM 11-1

An air offensive designed to obtain a strategic objective.

General Otto P. Weyland

The unified application of available air forces to achieve the objectives established by the theater commander, consisting of interrelated air operations conducted from an “operational level” perspective.

General Michael J. Dugan

Theater-level campaigns, part of air power’s operational art.

General Charles L. Donnelly, Jr.

**Air component.** The command echelon of a Joint Task Force consisting of air forces and their subordinate and supporting elements.

**Air component commander.** An airman in command of a Joint Task Force’s air component. (See Joint Force Air Component Commander.)

The air operational commander.

Colonel Wayne A. Possehl

**Air defense.** All defensive measures designed to destroy attacking enemy aircraft or missiles in the earth’s envelope of atmosphere, or to nullify or reduce the effectiveness of such attack.

Joint Pub 1-02

**Air interdiction.** Air operations conducted to destroy, neutralize, or delay the enemy’s military potential before it can be brought to bear effectively against friendly forces at such distance from friendly forces that detailed integration of each air mission with

the fire and movement of friendly forces is not required. See also interdiction.

Joint Pub 1-02

**Airlift.** Consists of operations conducted to transport and deliver forces and material in support of military objectives through the air and space.

AFM 2-25 (Draft)

Air supply and evacuation of people and materiel.

General Omar N. Bradley

Transportation by air.

Colonel Alexander P. Shine

**Air power.** The practical use of the air arm.

Major General Giulio Douhet

The ability to do something in or through the air; it consists of transporting all sorts of things by aircraft from one place to another.

Major General William (“Billy”) Mitchell

The total aviation activity, civilian and military, commercial and private, potential as well as existing.

General H. H. (“Hap”) Arnold

The total ability of a nation to fly, to act through the air space, and to use controlled flight.

John C. Cooper

The ability of a nation to assert its will via the air medium.

Major Alexander P. de Seversky

Space power, in the sense that air power and space power are synonymous, indivisible, homogenous; as in “air power is likewise space power.”

Major Alexander P. de Seversky

The sum of a nation’s aeronautical and astronautical capabilities.

General Thomas D. White

The ability of a nation to deploy its aircraft and weaponry, in the strategic, tactical, and logistic roles, to achieve the maximum advantages of mobility and firepower offered by the air-space.

S. T. Das

The ability to project military force by or from a platform in the third dimension above the surface of the earth.

Air Marshal M. J. Armitage

Air Vice-Marshal R. A. Mason

**Air-power.** Pertaining to air power, for example: Air-power education, air-power concepts.

**Airpower.** An alternate form of air power and air-power; since “aerospacepower” is cumbersome, “airpower” has the same meaning as the broad definitions of air power, that is, air and space power, unless otherwise stated.

**Air refueling.** The capability to refuel combat and combat support aircraft in flight, which extends presence, increases range, and allows air forces to bypass areas of potential trouble.

USAF Report to Congress, FY 1990

**Airspace management.** The coordination, integration, and regulation of the use of airspace of defined dimensions.

Joint Pub 1-02

**Air superiority.** That degree of dominance in the airbattle of one force over another which permits the conduct of operations by the former and its related land, sea, and air forces at a given time and place without prohibitive interference by the opposing force.

Joint Pub 1-02

Freedom of air navigation when maintained by one side through successful, sustained combat.

Major Alexander P. de Seversky

A means to an end: the capacity to achieve our own object in the air and to stop the enemy from achieving his.

Air Marshal J. C. Slessor

Gaining and maintaining freedom of action in the air and also freedom from enemy air attack.

General Charles L. Donnelly, Jr.

Securing control of the air in order to deny its use to the enemy to such an extent as will ensure the unrestricted use of that element in carrying out offensive operations not only in the air but on land and sea.

General Omar N. Bradley

A state of moral and material superiority over the enemy, which prevents him from seriously interfering with hostile air operations, and at the same time denies him the successful employment of his own air forces.

“Squadron Leader” (pseud.)

**Air supremacy.** That degree of air superiority wherein the opposing air force is incapable of effective interference.

Joint Pub 1-02

**Anti-satellite operations.** Defensive and offensive operations designed to neutralize, disrupt, or threaten hostile satellites or essential control elements.

**Armed reconnaissance.** A mission with the primary purpose of locating and attacking targets of opportunity, i.e., enemy materiel, personnel, and facilities, in assigned general areas or along assigned ground communications routes, and not for the purpose of attacking specific briefed targets.

Joint Pub 1-02

Fighter-bomber operations, ranging forward on rail and road cutting missions, harassing troop concentrations, strafing and bombing enemy columns on foot or in motor or rail transport, which delay the shifting of reserves and supplies.

General Omar N. Bradley

**Art of war.** The application of the knowledge, or science, of war.

Colonel Ned B. Rehkopf

Doing: the application of knowledge in the realm of practical affairs.

Edward Scott Johnston

Practice: the putting into practice of knowledge.

Edward Scott Johnston

The creative aspect of war, as opposed to the simple “craft” of war, which describes inferior military skill.

Colonel William Duane

The thought patterns of winning generals: looking for the enemy’s weaknesses and attacking them; going head to head only as a last resort; and recognizing your vulnerabilities and acting to hide or protect them.

Colonel Wayne A. Posschl

**Basic doctrine.** Establishes fundamental principles that describe and guide the proper use of aerospace forces in war. Basic doctrine, the foundation of all aerospace doctrine, provides broad, enduring guidance which should be used when deciding how Air Force forces should be organized, trained, equipped, employed, and sustained. Basic doctrine is the cornerstone and provides the framework from which the Air Force develops operational and tactical doctrine.

AFR 1-2

Doctrine that defines the roles and missions of the service, as well as the scope and potential capabilities of its weapons systems.

Major General I. B. Holley, Jr.

Prescriptions of general principles and methods for fighting in concert with other services and allies; the basic rationale for subordinate doctrine, development of service organizations and their materiel, the training of military professionals and units, and the professional education of its leaders. It is designed to apply today, worldwide, across the full spectrum of conflict, as well as to guide development of the service into the future.

Raoul Henri Alcala

**Battlefield strategy.** Tactics.

Colonel Dennis M. Drew

Dr Donald M. Snow

The art and science of employing forces on the battlefield to achieve national security objectives.

Colonel Dennis M. Drew

Dr Donald M. Snow

The art of directing masses on decisive points.

Major General Henry Wager Halleck

**Campaign.** A series of joint actions designed to attain a strategic objective in a theater of war.

US Army FM 100-5, May 1986

A series of related battles.

General Nathan F. Twining

The events occurring in a single theater of war.

General Carl von Clausewitz

A plan that establishes a path to the strategic goal.

Raoul Henri Alcala

A series of related military operations aimed to accomplish a strategic or operational objective within a given time and space.

Joint Test Pub 3-0

**Campaign plan.** A plan for a series of related military operations aimed to accomplish a common objective, normally within a given time and space.

Joint Pub 1-02

**Center of gravity.** That characteristic, capability, or locality from which a force derives its freedom of action, physical strength, or will to fight. It exists at the strategic, operational, and tactical levels of war.

Joint Test Pub 3-0

The sources of strength and balance from which a military force derives its freedom of action, physical strength, or will to fight. It may be the mass of the enemy force, the seam between two of its major force elements, a vital command and control center, its logistical base, its lines of communications, or something more abstract, such as military cohesion, morale, or the national will.

US Army FM 100-5, May 1986

The central feature of the enemy power, “the hub and movement of all power,” the point against which every effort should be expended.

General Carl von Clausewitz

Typically: in countries subject to domestic strife, the capital; in small countries that rely on large ones, the forces of their pro-



tector; among alliances, in the community of interest; in popular uprisings, the personalities of their leaders and public opinion.

General Carl von Clausewitz

**Close air support.** Air action against hostile targets which are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces.

Joint Pub 1-02

Air participation in the combined effort of the air and ground forces, in the battle, to gain objectives in the immediate front of these ground forces.

US Army FM 100-20, July 1943

**Cohesion.** The principle of establishing and maintaining the war-fighting spirit and capability of a force to win; the cement that holds a unit together through the trials of combat and is critical to the fighting effectiveness of a force.

AFM 1-1, March 1984 (definition abridged)

**Combatant command.** One of the unified or specified commands established by the President. [Not to be confused with the command authority titled “combatant command” exercised by commanders of unified and specified commands.]

Joint Pub 1-02

**Combat search and rescue.** A specific task performed by rescue forces to effect the recovery of distressed personnel during wartime or contingency operations.

Joint Pub 1-02

**Combat service support.** The essential logistic functions, activities, and tasks necessary to sustain all elements of an operating force in an area of operations. Combat service support includes but is not limited to administrative services, chaplain services, civil affairs, finance, legal service, health services, military police, supply, maintenance, transportation, construction, troop construction, acquisition and disposal of real property, facilities engineering, topographic and geodetic engineering functions, food service, graves registration, laundry, dry cleaning, bath, property disposal, and other logistic services.

Joint Pub 1-02

**Combat support.** The activity that creates and sustains warfighting capability by organizing, training, and equipping aerospace systems for deployment and employment.

AFM 1-10

Note: The Air Force understanding of combat support encompasses the Joint Pub 1-02 understanding of combat service support, but differs from the Army conception of combat support, included below.

Fire support and operational assistance provided to combat elements. Includes artillery, air defense artillery, engineer, military police, signal, military intelligence, and chemical.

Army FM 101-5-1

**Combat support elements.** Those elements whose primary missions are to provide combat support to the combat forces and which are a part, or prepared to become a part, of a theater, command, or task force formed for combat operations.

Joint Pub 1-02

**Combined.** Between two or more forces or agencies of two or more allies. (When all allies or services are not involved, the participating nations and services shall be identified; e.g., Combined Navies.)

Joint Pub 1-02

**CAUTION:** Combined and joint are often confused or reversed in meaning. For example: “Combined operations denote any operation of war involving a combined effort by sea, land, and air. The term *joint operations* [is] used for operations involving two or more Allies.” (*Encyclopaedia Britannica*, 1988.) This confusion is not helped by the term combined arms, below.

**Combined arms.** Two or more arms of the army, such as artillery, infantry, and armor, in mutual support to produce complementary and reinforcing effects.

Steven T. Ross

(While this is not a common US Air Force term, it is important to understand that surface forces may have this in mind when using the term *combined*.)

**Combined operation.** An operation conducted by forces of two or more allied nations acting together for the accomplishment of a single mission.

Joint Pub 1-02

**Command and control.** The exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.

Joint Pub 1-02

The concepts, organization, and equipment involved in both the commanding of military action and the controlling of its scope and direction.

Robert E. Hunter

**Command of the air.** To prevent the enemy from flying or from carrying out any aerial action at all.

Major General Giulio Douhet

The condition in war in which one side retains its freedom of air navigation and has the ability to deny that freedom to the enemy.

Major Alexander P. de Seversky

**Communications.** A method or means of conveying information of any kind from one person or place to another.

Joint Pub 1-02

The means of transmitting information and the decision of command.

Rear Admiral Henry E. Eccles

See also Lines of Communications for a significantly different meaning.

**Composite.** The integrated use of multiple disciplines of one service (a narrower concept of combined and joint arms).

Brigadier General Billy M. Knowles, Sr.

Teams with many types of complex weapons; the combination of attack, fighter-escort, and electronic warfare aircraft needed to conduct a mission, for example.

Major Robert M. Chapman, Jr.

**Concept.** A notion or statement of an idea, expressing how something might be done or accomplished, that may lead to an accepted procedure.

Joint Pub 1-02

A proposed idea that has not arrived at the level of respectability achieved by doctrine; a hypothesis.

Major General Dale O. Smith

**Conflict.** An armed struggle or clash between organized parties within a nation or between nations in order to achieve limited political or military objectives. While regular forces are often involved, irregular forces frequently predominate. Conflict is often protracted, confined to a restricted geographic area, and constrained in weaponry and level of violence. Within this state, military power in response to threats may be exercised in an indirect manner while supportive of other elements of national power. Limited objectives may be achieved by the short, focused, and direct application of force.

Joint Test Pub 3-0

**Contingency.** An emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid response and special procedures to ensure the safety and readiness of personnel, installations and equipment.

Joint Pub 1-02

A possible future emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid response capability, and special procedures to ensure the safety and readiness of personnel, installations, and equipment.

Joint Test Pub 3-07

**Conventional (forces, war, weapons).** Military organizations, hostilities, and hardware that exclude nuclear, biological, or lethal chemical weapons.

Library of Congress

The sort of arms and forces with which World War II was fought, but much improved.

Winston S. Churchill

**Conventional forces.** Those forces capable of conducting operations using nonnuclear weapons.

Joint Pub 1-02

**Conventional weapon.** A weapon which is neither nuclear, biological nor chemical.

Joint Pub 1-02

**Counter aerospace operations.** Aerospace operations conducted to attain and maintain aerospace supremacy by the destruction or neutralization of enemy aerospace forces, thereby affording friendly forces freedom of action within the medium of conflict as well as on the Earth's surface.

AFM 11-1

**Counter air.** A United States Air Force term for air operations conducted to attain and maintain a desired degree of air superiority by the destruction or neutralization of enemy forces. Both air offensive and air defensive actions are involved. The former range throughout enemy territory and are generally conducted at the initiative of the friendly forces. The latter are conducted near to or over friendly territory and are generally reactive to the initiative of the enemy air forces.

Joint Pub 1-02

Attacks against aircraft in the air and on the ground, and against those enemy installations which he requires for air power, leading to air superiority.

FM 100-20, July 1943

**Counter air operation.** An air operation directed against the enemy's air offensive and defensive capability in order to attain and maintain a desired degree of air superiority.

Joint Pub 1-02

**Counterinsurgency.** Those military, paramilitary, political, economic, psychological, and civic actions taken by a government to defeat insurgency.

Joint Pub 1-02

**Counterterrorism.** Offensive measures taken to prevent, deter, and respond to terrorism. Also called CT.

Joint Pub 1-02

**Culminating point.** A finite range beyond which military forces can not effectively or prudently operate.

Joint Pub 0-1 (Draft)

Unless it is strategically decisive, every offensive operation will sooner or later reach a point where the strength of the attacker no longer significantly exceeds that of the defender, and beyond which continued offensive operations therefore risk overextension, counterattack, and defeat. In operational theory, this point is called the culminating point.

US Army FM 100-5, May 1986

The point of the optimum, beyond which every added increment to any component of the effort will result in a corresponding decline in accomplishment.

Colonel J. M. Cameron

The point beyond which additional effort is not merely useless, but damaging.

General Carl von Clausewitz

The point men reach where they see, or feel, that further effort or sacrifice can do no more than delay the end, lose the will to spin it out, and bow to the inevitable.

Captain B. H. Liddell Hart

**Deception.** Those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce him to react in a manner prejudicial to his interests.

Joint Pub 1-02

**Defensive counterair operations.** The protection of assets from air attack through both direct defense and destruction of the enemy's air attack capacity in the air.

Joint Pub 3-01.2

**Deterrence.** The prevention from action by fear of the consequences. Deterrence is a state of mind brought about by the existence of a credible threat of unacceptable counteraction.

Joint Pub 1-02

Measures to discourage or restrain an enemy from using his military forces.

Library of Congress

To prevent, especially war.

General Thomas D. White

**Direct action mission.** In special operations, a specified act involving operations of an overt, covert, clandestine or low visibility nature conducted primarily by a sponsoring power's special operations forces in hostile or denied areas.

Joint Pub 1-02

Short-duration strikes and other small-scale offensive actions principally taken by special operations forces to seize, destroy, or inflict damage on a specified target; or to destroy, capture, or recover designated personnel or material. In the conduct of these operations, special operations forces may employ raid, ambush, or direct assault tactics; emplace mines and other munitions; conduct standoff attacks by fire from air, ground, or maritime platforms; provide terminal guidance for precision-guided munitions; and conduct independent sabotage. Also called DA.

Joint Test Pub 3-05

**Direct air support.** A general term for air operations in support of ground operations.

General Omar N. Bradley

**Direct support.** A mission requiring a force to support another specific force and authorizing it to answer directly the supported force's request for assistance.

Joint Pub 1-02

**Doctrine.** What we believe about the best way to do things.

Colonel Dennis M. Drew  
Dr Donald M. Snow

Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application.

Joint Pub 1-02

That mode of approach that repeated experience has shown usually works best.

Major General I. B. Holley, Jr.

The central beliefs for waging war in order to achieve victory; the building material for strategy.

General Curtis E. LeMay

Beliefs or teachings which have been reasoned from principles, intended as general guides to the acceptance of mutually accepted principles and thus to furnish a practical basis for coordination under the extremely difficult conditions governing contact between hostile forces.

Edward Scott Johnston

The philosophy and principles for waging war as held by the military.

Major General Dale O. Smith

The principles that guide combat operations.

Raoul Henri Alcala

Prescribed procedures.

Rear Admiral Henry E. Eccles

**Education.** Instruction to prepare students to define problems in an environment of complexity and uncertainty, to comprehend a range of alternative solutions, and to develop the analytical skills required for reaching preferred solutions.

Major General I. B. Holley, Jr.

How to think, as opposed to what to think.

Colonel Gene S. Bartlow

**Electronic combat.** Action taken in support of military operations against the enemy's electromagnetic capabilities.



Electronic combat includes electronic warfare (EW), elements of command, control, and communications countermeasures (C<sup>3</sup>CM), and suppression of enemy air defenses (SEAD).

AFM 11-1

**Elements of national power.** All the means that are available for employment in the pursuit of national objectives.

Joint Pub 1-02

The economic, political, psychological, technological, and military strength of a nation (as opposed to basic power factors).

General Nathan F. Twining

**Environmental doctrine.** The rubric for sea power, air power, land power, and space power doctrine. A compilation of beliefs about the employment of military forces within a particular operating medium.

Colonel Dennis M. Drew  
Dr Donald M. Snow

**Expeditionary force.** An armed force organized to accomplish a specific objective in a foreign country.

Joint Pub 1-02

**Flexibility.** An attribute of airpower: at the tactical level, it means that we are not committed to any one course of action, nor to a fixed allotment of any proportion of our force to any particular task, but can switch our strength or any proportion of it from one objective or task to another as the need arises.

Air Marshal J. C. Slessor

**Fog of war.** Uncertainty due to the general unreliability of all information.

General Carl von Clausewitz (usage)

Confusion created by perpetually incomplete and inaccurate information about the true state of affairs in war.

Colonel Dennis M. Drew  
Dr Donald M. Snow

The perennial inadequacies and inaccuracies of intelligence.

Bernard Brodie

A source of friction in war; reports that are false, contradictory, exaggerated, and erroneous, and the ensuing difficulty of accurately perceiving circumstances.

General Carl von Clausewitz

Imperfect perception of battle resulting from lack of professional knowledge.

Chevalier Foulard

Accidents and misunderstandings.

Major General I. B. Holley, Jr.

The idea that many things on the battlefield are unknown and will remain unknown. Therefore, decisions will never be based on perfect information and commanders will have to cope with much uncertainty during war.

Major Thomas H. Buchanan

**Force application.** Operation conducted primarily from space with the objectives of strategic defense and power projection. These operations include defense against ballistic missiles.

AFR 23-51

The Air Force role that consists of operations that apply firepower against surface targets, exclusive of missions whose objective is aerospace control.

Potential combat missions, excluding aerospace control and force enhancement missions.

Colonel Kenneth A. Myers  
Lieutenant Colonel John G. Tockston

**Force enhancement.** Operations conducted to improve the effectiveness of both terrestrial and space-based forces. These include such capabilities as communications, navigation, and surveillance.

AFR 23-51

The Air Force role that embodies aerospace operations that add to military capability but that do not apply firepower.

Missions that directly support both aerospace and terrestrial combat forces but do not by themselves counter or apply force against enemy targets.

Colonel Kenneth A. Myers  
Lieutenant Colonel John G. Tockston

Space-based navigation, meteorology, communications, tactical warning and attack assessment, and wide-area surveillance support for space and terrestrial forces.

USAF Report to Congress, FY 1990

**Force package.** Combinations of specific aircraft and systems for reconnaissance, defense suppression, electronic combat, air defense, command and control, and attack; working together to suppress enemy defenses, destroy assigned targets, and minimize loss rates.

General Michael J. Dugan

**Force projection.** Strategic airlift, theater airlift, aerial refueling, and combat rescue.

USAF Report to Congress, FY 1990

**Force support.** The Air Force role that is made up of the varied operations that support and sustain the aerospace combat roles of aerospace control, force application, and force enhancement.

**Foreign internal defense.** Participation by civilian and military agencies of a government in any of the action programs taken by another government to free and protect its society from subversion, lawlessness, and insurgency.

Joint Pub 1-02

**Fratricide.** Destruction of friendly forces when destruction of enemy forces is intended, whether due to misidentification, unforeseen activity, confusion, or inadvertence.

**Frequency management.** The conscious and systematic allocation of frequencies in a theater of war for military purposes to minimize interference and maximize reliability.

**Friction of war.** The accumulation of difficulties which makes each effort in war less efficient than theory would predict; unexpected

difficulties, compounded by danger and exertion; that which makes the simplest thing difficult in war.

General Carl von Clausewitz

Small and sometimes insignificant events or incidents which collectively drag down the overall level of performance, play havoc with timetables, and result in the failure to achieve objectives as intended.

Colonel Dennis M. Drew  
Dr Donald M. Snow

The only concept that more or less corresponds to the factors that distinguish real war from war on paper.

General Carl von Clausewitz

The ubiquitous uncertainties and inescapable difficulties that form the atmosphere of real war.

Lieutenant Colonel Barry D. Watts

The effect of two sides wrestling with powerful, interwoven physical and psychological forces in war, as opposed to the mathematical problems of theoretical war.

Erich Ludendorff

**Functions.** The appropriate or assigned duties, responsibilities, missions, or tasks of an individual, office, or organization.

Joint Pub 1-02 (definition abridged)

Responsibilities assigned to a Service through Executive action which permit it to successfully fulfill its legally-established role; more specific than roles.

CJCS Report, "Roles and Functions of the Armed Forces," 1989 (Draft)

**Functional doctrine.** Establishes principles, concepts, and considerations that guide the conduct of combat support operations to sustain, maintain, and assist the conduct of the air war. Functional doctrine must conform to the employment concepts and principles contained in basic and operational doctrine.

AFR 1-2

**Fusion.** The integration of collected intelligence or sensor observations to produce a coherent picture of operations, the environment, and enemy activities.

Integration of information to form a more comprehensive view of the tactical/theater/strategic situation. Fusion normally consists of the integration of information from different sources (e.g., imagery-derived intelligence, IMINT, and electronic intelligence, ELINT). It can also refer to the integration of intelligence information and operations data (the location, strength, and intentions of friendly forces) to form a clearer picture of the evolving battle or the success of an air campaign.

Joint Pub 2-0 (Draft)

**Geography.** The one static or, more properly, constant factor within the spectrum of strategy.

Air Vice-Marshal E. J. Kingston-McCloughry

**Grand strategy.** The art and science of coordinating the development and use of the instruments of power to achieve national security objectives.

Colonel Dennis M. Drew

Dr Donald M. Snow

The art of employing all the resources of a nation or coalition of nations to achieve the objects of war (and peace).

*Encyclopaedia Britannica*, 15th Edition, 1988

The role of Grand Strategy—higher strategy—is to coordinate and direct all the responses of a nation, or band of nations, towards the attainment of the political object of the war—the goal defined by fundamental policy.

Captain B. H. Liddell Hart

The coordination and direction of all the resources of a nation, or group of nations, towards the attainment of the political objective of the war—the goal defined by the fundamental policy. The true object of grand strategy must be a secure and lasting peace.

Field Marshal B. L. Montgomery

A concept covering the industrial, financial, demographic and societal aspects of war.

Michael Howard

The means by which a state plans to use force or the threat of force to achieve political ends.

Michael C. Desch

The British term for National Strategy.

Russell F. Weigley

**Guidance.** Policy, direction, decision, or instruction having the effect of an order when promulgated by a higher echelon.

Joint Pub 1-02 (definition abridged)

**Infrastructure.** A term generally applicable to all fixed and permanent installations, fabrications, or facilities for the support and control of military forces.

Joint Pub 1-02

**Insurgency.** An organized movement aimed at the overthrow of a constituted government through use of subversion and armed conflict.

Joint Pub 1-02

Protracted revolutionary warfare.

Major Richard D. Newton

**Intelligence.** Every sort of information about the enemy and his country—the basis, in short, of our plans and operations.

General Carl von Clausewitz

The product resulting from the collection, processing, integration, analysis, evaluation, and interpretation of available information concerning foreign countries or areas.

Joint Pub 1-02

Detailed and moment-by-moment knowledge of all aspects of civilian and military activity within the territory of an enemy or a potential enemy, covering their entire political, social, industrial, scientific, and military life.

General H. H. (“Hap”) Arnold

The painstaking collection and analysis of fact, exercise of judgment, and clear and quick presentation; it is rigorous, continuous, and above all operational.

*The Economist*, 1 October 1966

That which sheds light on the situation.

Rear Admiral Henry E. Eccles

What a staff makes out of the available evidence.

Barbara Tuchman

**Interdiction.** An action to divert, disrupt, delay or destroy the enemy's surface military potential before it can be used effectively against friendly forces.

Joint Pub 1-02

To prevent the movement of hostile troops and supplies into the battle area or within it.

FM 100-20, July 1943

Isolation of the battlefield; the means to limit or deny supplies and restrict maneuver in the battle area.

General Omar N. Bradley

Air operations against the lines of communication of an army.

Colonel M. A. Wingfield

Isolation of the battlefield by air action.

General Omar N. Bradley

**Interoperability.** The ability of systems, units, or forces to provide services to and accept services from other systems, units or forces and to use the services so exchanged to enable them to operate effectively together.

Joint Pub 1-02

**Intertheater airlift.** The air movement of personnel and materiel between the continental United States (CONUS) and overseas areas, normally over long distances.

AFM 11-1 (definition abridged)

**Intratheater airlift.** The air movement of personnel and materiel within an area, command, or theater of operations.

AFM 11-1

**Joint.** Connotes activities, operations, organizations, etc., in which elements of more than one Service of the same nation participate. (When all Services are not involved, the participating Services shall be identified, e.g., Joint Army-Navy.)

Joint Pub 1-02

**Joint doctrine.** Fundamental principles that guide the employment of forces of two or more Services in coordinated action toward a

common objective. It will be promulgated by the Joint Chiefs of Staff.

Joint Pub 1-02

**Joint force air component commander.** The joint force air component commander derives his authority from the joint force commander who has the authority to exercise operational control, assign missions, direct coordination among his subordinate commanders, redirect and organize his forces to ensure unity of effort in the accomplishment of his overall mission. The joint force commander will normally designate a joint force air component commander. The joint force air component commander's responsibilities will be assigned by the joint force commander (normally these would include, but not be limited to, planning, coordination, allocation and tasking based on the joint force commander's apportionment decision). Using the joint force commander's guidance and authority, and in coordination with other service component commanders and other assigned or supporting commanders, the joint force air component commander will recommend to the joint force commander apportionment of air sorties to various missions or geographic areas.

Joint Pub 1-02

**Joint maritime operations (air).** The employment of joint force air efforts to achieve military objectives in the maritime environment.

Joint Test Pub 3-04

**Joint operation.** A military action or the carrying out of a strategic, operational, tactical, training, or administrative military mission by forces from two or more Services; also, the conduct of combat, including movement, supply, attack, defense, and maneuvers, by forces of two or more Services needed to gain the objectives of any battle or campaign.

Joint Test Pub 3-0

**Joint operations.** Two or more independent services functioning in their own operational environments, whether land, sea, or air, under a single point of command to meet a common aim.

Wing Commander Brian Kavanagh, RAAF



**Joint strategy.** An overall strategy for all services; a unified effort whose primary aim is a maximum joint effort, at the most critical offensive facet of our forces, balanced by a similar effort at the most vulnerable facet to the enemy at any particular phase of war.

Air Vice-Marshal E. J. Kingston-McCloughry

**Joint task force.** A force composed of assigned or attached elements of the Army, the Navy or the Marine Corps, and the Air Force, or two or more of these Services, which is constituted and so designated by the Secretary of Defense or by the commander of a unified command, a specified command, or an existing joint task force.

Joint Pub 1-02

**Leadership.** Responsibility.

General Curtis E. LeMay

Inducing followers to act for certain goals that represent the values and motivations, wants and needs, and aspirations and expectations of both leadership and followers.

James MacGregor Burns  
(quoted by General Curtis E. LeMay)

The ability to distinguish essentials from non-essentials, to grasp quickly the elements of the changing situation, and the intestinal fortitude to keep cool and continue fighting when the going gets tough.

Admiral Raymond A. Spruance

The capacity and the will to rally men and women to a common purpose, and the character which inspires confidence.

Field Marshal B. L. Montgomery

**Levels of war.** Loci (or frames of reference) where certain military activities are performed. Each is concerned with means and ends, and ways to link the two. The commonly perceived levels of war are strategy, the operational level, and tactics.

Colonel Kenneth G. Carlson

**Limited war.** Armed conflict short of general war, exclusive of incidents, involving the overt engagement of the military forces of two or more nations.

Joint Pub 1-02

**Lines of communications (LOC).** All the routes, land, water, and air, which connect an operating military force with a base of operations and along which supplies and military forces move.

Joint Pub 1-02

**Logistics.** The science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, those aspects of military operations which deal with: a. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; b. movement, evacuation, and hospitalization of personnel; c. acquisition or construction, maintenance, operation, and disposition of facilities; and d. acquisition or furnishing of services.

Joint Pub 1-02

The creation and sustained support of weapons and forces to be tactically employed to attain strategic objectives.

Rear Admiral Henry E. Eccles

The military element in the nation's economy and the economic element in its military operations.

*Encyclopaedia Britannica*, 15th Edition, 1988

A continuum of support, from industry through combat.

Colonel Gene S. Bartlow

**Low intensity conflict.** Political-military confrontation between contending states or groups below conventional war and above the routine, peaceful competition among states. It frequently involves protracted struggles of competing principles and ideologies. Low intensity conflict ranges from subversion to the use of armed force. It is waged by a combination of means employing political, economic, informational, and military instruments. Low intensity conflicts are often localized, generally in the Third World, but contain regional and global security implications.

Joint Pub 1-02

**Maritime operation.** An action performed by forces on, under, or over the sea to gain or exploit control of the sea or to deny its use to the enemy.

Joint Pub 1-02

**Military art.** The “feel” for battle.

General Glenn Otis

The studied and creative planning and conduct of military affairs.  
What military forces should or should not do and why.

Colonel Dennis M. Drew

**Military capability.** The ability to achieve a specified wartime objective (win a war or battle, destroy a target set). It includes four major components: force structure, modernization, readiness, and sustainability.

- a. **force structure**—Numbers, size, and composition of the units that comprise our Defense forces; e.g., divisions, ships, airwings.
- b. **modernization**—Technical sophistication of forces, units, weapon systems, and equipments.
- c. **readiness**—The ability of forces, units, weapon systems, or equipments to deliver the outputs for which they were designed (includes the ability to deploy and employ without unacceptable delays).
- d. **sustainability**—The ability to maintain the necessary level and duration of operational activity to achieve military objectives. Sustainability is a function of providing for and maintaining those levels of ready forces, materiel, and consumables necessary to support military effort.

Joint Pub 1-02

**Military doctrine.** What a military organization believes about the best way to conduct military affairs.

Colonel Dennis M. Drew  
Dr Donald M. Snow

The school of thought on war which is in vogue at any one time.

Major General Dale O. Smith

The current philosophy for waging war.

Major General Dale O. Smith

**Military education.** The systematic instruction of individuals in subjects which will enhance their knowledge of the science and art of war.

Joint Pub 1-02

**Military science.** Disciplined thinking about military affairs.

Michael Howard

Systematic and exact body of knowledge about the conduct of military affairs. What one can or cannot do in terms of military operations—the technical and managerial aspects of developing and employing military forces.

Colonel Dennis M. Drew

**Military strategy.** The art and science of employing the armed forces of a nation to secure the objectives of national policy by the application of force or the threat of force.

Joint Pub 1-02

The art and science of coordinating the development, deployment, and employment of military forces to achieve national security objectives.

Colonel Dennis M. Drew  
Dr Donald M. Snow

The use of military forces to achieve national objectives.

General John R. Galvin

The art of distributing and applying military means, such as armed forces and supplies, to fulfill the ends of policy.

Field Marshal B. L. Montgomery

The art of war upon the map, [which] comprehends the whole theater of operations . . . [it] determines where to act.

General A. H. Jomini

The art of employment of battles as a means to gain the object of war. In other words, strategy forms the plan of the war, maps out the proposed course of the different campaigns which compose the war, and regulates the battles to be fought in each.

General Carl von Clausewitz

A general plan to overcome the obstacles of geography.

Major Alexander P. de Seversky

**Military training.** The instruction of personnel to enhance their capacity to perform specific military functions and tasks; the exercise of one or more military units conducted to enhance their combat readiness.

Joint Pub 1-02

**Mission.** **1.** The task, together with the purpose, that clearly indicates the action to be taken and the reason therefor. **2.** In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task. **3.** The dispatching of one or more aircraft to accomplish one particular task.

Joint Pub 1-02

Those tasks assigned to a Unified or Specified command by the President or the Secretary of Defense.

CJCS Report, "Roles and Functions of the Armed Forces," 1989 (Draft)

**Mobility.** A quality or capability of military forces which permits them to move from place to place while retaining the ability to fulfill their primary mission.

Joint Pub 1-02

**Multi-Service doctrine.** Fundamental principles that guide the employment of forces of two or more Services in coordinated action toward a common objective. It is ratified by two or more Services, and is promulgated in multi-Service publications that identify the participating Services, e.g., Army-Navy doctrine.

Joint Pub 1-02

**Mutual support.** That support which units render each other against an enemy, because of their assigned tasks, their position relative to each other and to the enemy, and their inherent capabilities.

Joint Pub 1-02

**National interests.** A highly generalized concept of elements that constitute a state's compelling needs, including self-preservation, independence, national integrity, military security, and economic well-being.

John Collins

Fundamental concerns of the nation.

Colonel Arthur F. Lykke, Jr.

The general and continuing end for which a state acts.

Rear Admiral Henry E. Eccles

**National objectives.** Those fundamental aims, goals, or purposes of a nation—as opposed to the means for seeking these ends—

toward which a policy is directed and efforts and resources of the nation are applied.

Joint Pub 1-02

**National Policy.** A broad course of action or statements of guidance adopted by the government at the national level in pursuit of national objectives.

Joint Pub 1-02

Specific courses of action designed to achieve objectives.

Brookings Institution

**National strategy.** The art and science of developing and using the political, economic, and psychological powers of a nation, together with its armed forces, during peace and war, to secure national objectives.

Joint Pub 1-02

Synonymous with national security strategy, grand strategy, higher strategy, and policy.

**Nuclear warfare.** Warfare involving the employment of nuclear weapons.

Joint Pub 1-02

**Nuclear weapon.** A complete assembly (i.e., implosion type, gun type, or thermonuclear type), in its intended ultimate configuration which, upon completion of the prescribed arming, fusing and firing sequence, is capable of producing the intended nuclear reaction and release of energy.

Joint Pub 1-02

**Nuclear weapons.** Fission and fusion weapons; “atomic,” “Hydrogen,” “thermodynamic” and all other similar weapons.

Winston S. Churchill

**Objective.** The physical object of the action taken, e.g., a definite tactical feature, the seizing and/or holding of which is essential to the commander’s plan.

Joint Pub 1-02

**Offensive counter air operation.** An operation mounted to destroy, disrupt or limit enemy air power as close to its source as possible.

Joint Pub 1-02

**Operation.** A military action or the carrying out of a strategic, tactical, service, training, or administrative military mission; the process of carrying on combat, including movement, supply, attack, defense and maneuvers needed to gain the objectives of any battle or campaign.

Joint Pub 1-02

**Operational.** Related to something that somebody wants to do or may be forced to do.

*The Economist*, 1 October 1966

**Operational art.** The employment of military forces to attain strategic or operational objectives in a theater of war or in a theater of operations through the design, organization, and conduct of campaigns and major operations. Operational art translates theater strategy into operational and, ultimately, tactical action. No specific level of command is solely concerned with the operational art.

Joint Test Pub 3-0

Warfare at the level between strategy and tactics—or how to conduct overall theater campaigns.

General Charles L. Donnelly, Jr.

The activity that identifies enemy centers of gravity and defines the organization and subsequent focusing of superior combat power at deliberately selected points of vulnerability or of decision, to directly or indirectly attack those centers of gravity.

Major Stephen E. Runals

The orchestration of joint and combined arms.

Lieutenant Colonel G. Murphy Donovan

**Operational continuum.** The general states of peacetime competition, conflict, and war within which various types of military operations and activities are conducted.

Joint Test Pub 3-0

**Operational level doctrine.** Establishes principles that guide the use of aerospace forces in campaigns and major operations. It examines relationships among objectives, forces, environments and actions to ensure that aerospace operations contribute to achieving assigned objectives. Operational doctrine is at the

operational level of war and is concerned with activities which link tactics and strategy by establishing operational objectives needed to accomplish strategic objectives, sequencing events to achieve operational objectives, initiating actions, and applying resources to bring about and sustain these events. Actions at the operational level of war create conditions to ensure tactical events (engagements and battles) contribute to attainment of assigned military objectives, and ultimate attainment of national or alliance goals. Operational doctrine should anticipate changes and influences which may affect military operations, including trends in opponent employment concepts and technological advances. The Air Force publishes operational doctrine in HQ USAF 2- and 3-series manuals.

AFR 1-2

**Operational level of war.** The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives.

Joint Pub 1-02

The level where generals fight.

Colonel Wayne A. Possehl

Larger actions involving many units.

Edward N. Luttwak

**Operational strategy.** The art and science of planning, orchestrating, and directing military campaigns within a theater of operations to achieve national security objectives.

Colonel Dennis M. Drew  
Dr Donald M. Snow



A strategy based on existing military capabilities; a strategy that is used as a foundation for the formulation of specific plans for action in the short-range time period. This level of strategy has been referred to as grand tactics, higher tactics, and operational art.

Colonel Arthur F. Lykke, Jr.

Concentrations of such major units as corps and divisions in preparation for battle.

*Encyclopaedia Britannica*, 15th Edition, 1988

**Operations.** A term the Germans and Russians came to use to apply to the planning, organizing, and direction of specific campaigns, intermediate between the tactical realm of battles and the strategic realm at the highest level of military decision making.

Russell F. Weigley

A combination of tactical and logistic action to serve the purposes of strategy.

Rear Admiral Henry E. Eccles

**Orchestration.** Direction and control of operations to achieve mutual support, create opportunities, and achieve results greater than the arithmetic sum of efforts.

**Organizational doctrine.** Basic beliefs about the operation of a particular military organization or group of military organizations.

Colonel Dennis M. Drew

Dr Donald M. Snow

**Peacetime competition.** A nonhostile state wherein political, economic, psychological, and military measures, short of US combat operations or active support to warring parties, are employed to achieve national objectives

Joint Test Pub 3-0

**Policy.** Often used to mean grand strategy.

Colonel Dennis M. Drew

Dr Donald M. Snow

A principle, plan, or course of action as pursued by an organization.

AFM 2-XZ (Draft)

**Professional development.** The product of professional training, education, and relevant experience, synthesized and amplified by reflection; deliberate professional growth to improve breadth, effectiveness, and the capacity to serve at higher levels.

**Professional military education.** A means of understanding the art and science of war and the military environment.

Doctrine for Professional Military Education,  
1988 (Draft)

**Readiness.** The ability of forces, units, weapon systems, or equipments to deliver the outputs for which they were designed (includes the ability to deploy and employ without unacceptable delays).

Joint Pub 1-02

The totality of proficiency and sufficiency in forces, units, air bases, weapons systems, and equipment.

USAF Report to Congress, FY 1990

**Reconnaissance.** A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy; or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.

Joint Pub 1-02

**Reserve. 1.** Portion of a body of troops which is kept to the rear, or withheld from action at the beginning of an engagement, available for a decisive movement. **2.** Members of the military Services who are not in active service but who are subject to call to active duty.

Joint Pub 1-02 (two of three definitions)

Forces held back either to prolong and renew the action, or to counter unforeseen threats.

General Carl von Clausewitz

**Role.** The specific function assigned to or performed by a military force in contributing to the support or attainment of a broader, more generally defined, mission.

AFM 11-1

**Roles.** The broad and enduring purposes for which a Service was established by the Congress in law.

Title 10, US Code

**Rules of engagement (ROE).** Directives issued by competent military authority which delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered.

Joint Pub 1-02

**Science (of war).** Organized knowledge.

Edward Scott Johnston

Organized common sense.

Thomas Huxley (used by B. H. Liddell Hart)

The language of reports, at the level of greatest general usefulness.

S. I. Hayakawa (definition of science)

Understanding those elements involved in preparations for and actual execution of war. The what and how, as opposed to the when, where, who, and why, of war.

Doctrine for Professional Military Education,  
1988 (Draft)

**Search and rescue.** The use of aircraft, surface craft, submarines, specialized rescue teams and equipment to search for and rescue personnel in distress on land or at sea.

Joint Pub 1-02

**Space control.** Operations that ensure freedom of action in space for friendly forces while limiting or denying the enemy freedom of action when so directed by the National Command Authorities. These operations include satellite protection and satellite negation.

AFR 23-51

The broad mission comprised of monitoring, assessing and informing operators of threats against space systems; defense of friendly systems; the negation of hostile space platforms; assuring access to space; and maintaining the capacity to deny access to space to a potential foe during hostilities.

William E. Ramsey

A mission category that encompasses counterspace operations, which can be either spaceborne or terrestrially based; it includes capabilities to ensure survivability of friendly space assets and to nullify or destroy enemy space capabilities.

Colonel Kenneth A. Myers  
Lieutenant Colonel John G. Tockston

Not only protection of assets in space and denial of space resources to the enemy, but also the unhindered operation of all procedures needed to protect and employ military power—both offensive and defensive—in space while denying it to the enemy.

Dr Stephen Blank

**Space control operations.** Operations that provide freedom of action in space for friendly forces while, when directed, denying it to an enemy, and include the broad aspects of protection of US and US allied space systems and negation of enemy space systems. Space control operations encompass all elements of the space defense mission.

Joint Pub 1-02

**Space defense.** All defensive measures designed to destroy attacking enemy vehicles (including missiles) while in space, or to nullify or reduce the effectiveness of such attack.

Joint Pub 1-02

**Space power.** That portion of aerospace power that exploits the space environment for the enhancement of terrestrial forces and for the projection of combat power to, in, and from space to influence terrestrial conflict.

AFM 2-25 (Draft)

The space component of aerospace power—and air power, as it is most broadly defined.

**Space support.** Operations required to deploy and maintain military equipment and personnel in space. These include activities such as launching and deploying vehicles, maintaining and sustaining space vehicles on orbit, and recovering vehicles if required.

AFR 23-51

Activities involving launching, deploying, maintaining and controlling while in orbit, and recovering space vehicles, if required.

USAF Report to Congress, FY 1990

The launching and monitoring of satellites, “housekeeping” of systems in orbit, dissemination of information from space systems, surveillance, navigation, and communication.

William E. Ramsey

All missions required to launch, deploy, and sustain military space systems. It involves activities such as prelaunch preparations, launch, on-orbit satellite control, manned space support activities, orbital maneuvers, space tracking, logistics, communications, training, and personnel.

Colonel Kenneth A. Myers

Lieutenant Colonel John G. Tockston

Operating the spacecraft that perform force enhancement.

Captain Roger C. Burk

**Space support operations.** Operations required to ensure that space control and support of terrestrial forces are maintained. They include activities such as launching and deploying space vehicles, maintaining and sustaining space vehicles while on orbit, and recovering space vehicles if required.

Joint Pub 1-02

**Special operations.** Operations conducted by specially trained, equipped, and organized DOD forces against strategic or tactical targets in pursuit of national military, political, economic, or psychological objectives. These operations may be conducted during periods of peace or hostilities. They may support conventional operations, or they may be prosecuted independently when the use of conventional forces is either inappropriate or infeasible.

Joint Pub 1-02

**Special reconnaissance operations.** Reconnaissance and surveillance actions conducted by special operations forces to obtain or verify, by visual observation or other collection methods, information concerning the capabilities, intentions, and activities of an actual or potential enemy, or to secure data concerning the meteorological,

hydrographic, geographic, or demographic characteristics of a particular area. These operations include target acquisition, area assessment, and post-strike reconnaissance. Also called SR.

Joint Test Pub 3-05

**Specified command.** A command that has a broad continuing mission and that is established and so designated by the President through the Secretary of Defense with the advice and assistance of the Joint Chiefs of Staff. It normally is composed of forces from but one Service.

Joint Pub 1-02

**Strategic airlift.** The continuous or sustained movement of units, personnel, and materiel in support of all Department of Defense agencies between area commands; between the continental United States (CONUS) and overseas areas; and within an area of command when directed. Strategic airlift resources possess a capability to airland or airdrop troops, supplies, and equipment for augmentation of tactical forces when required.

AFM 11-1

Deployment of forces from their stateside locations over long distances to a theater of operations.

USAF Report to Congress, FY 1990

The employment of sustained, mass air transport.

General Laurence S. Kuter

**Strategic air defense operation.** One that uses air defense forces, independently or with other air, ground, or naval forces, to detect, identify, intercept, and, if necessary, destroy enemy air vehicles attempting to penetrate the defined air space of North America.

AFR 23-10

**Strategic air warfare.** Air combat and supporting operations designed to effect, through the systematic application of force to a selected series of vital targets, the progressive destruction and disintegration of the enemy's war-making capacity to a point where the enemy no longer retains the ability or the will to wage war. Vital targets may include key manufacturing systems, sources of raw material, critical material, stockpiles, power systems, transportation systems,

communication facilities, concentration of uncommitted elements of enemy armed forces, key agricultural areas, and other such target systems.

Joint Pub 1-02

An independent air campaign, intended to be decisive, and directed against the essential war-making capacity of the enemy.

General Carl A. ("Tooe") Spaatz,  
(definition of *strategic bombing*)

Aerial warfare against a selected series of vital targets.

House Committee on Armed Services,  
1 March 1950

**Strategic defense.** The mission of providing timely, reliable and unambiguous tactical warning, attack assessment, and, ultimately, damage limitation; it is divided into the areas of atmospheric defense, ballistic missile warning, and space defense.

USAF Report to Congress, FY 1990

Defense of a nation against air attack; detection, identification, interception, and, in the event of an actual air attack, destruction of the attacking forces. National or Continental air defense.

General Earle E. Partridge

**Strategic level of war.** The level of war at which a nation or group of nations determines national or alliance security objectives and develops and uses national resources to accomplish those objectives. Activities at this level establish national and alliance military objectives; sequence initiatives; define limits and assess risks for the use of military and other instruments of power; develop global or theater war plans to achieve those objectives; and provide armed forces and other capabilities in accordance with the strategic plan.

Joint Pub 1-02

**Strategic plan.** A plan for the overall conduct of a war.

Joint Pub 1-02

**Strategy.** A plan of action that organizes efforts to achieve objectives.

Colonel Dennis M. Drew  
Dr Donald M. Snow

The art and science of developing and using political, economic, psychological, and military forces as necessary during peace and war, to afford the maximum support to policies, in order to increase the probabilities and favorable consequences of victory and to lessen the chances of defeat.

Joint Pub 1-02

The art of using power.

Stephen B. Jones

A subject embracing political, military, economic, and psychological means for the attainment of war aims.

General Albert C. Wedemeyer

An art in which the dominant characteristic is properly unity, totality, or whole nature; a plan of a whole undertaking which includes the general theme, and the interrelationships among the details.

W. K. Sanderson

A system of expedients. More than science, it is the application of knowledge to practical life, the development of the original guiding thought in accordance with continually changing circumstances; it is the art of operating under the pressure of difficult conditions.

General Helmuth Moltke (the Elder)

The theory of the use of combats for the object of the war.

General Carl von Clausewitz

The art of comprehensive direction of power to control situations and areas in order to attain objectives.

Rear Admiral Henry E. Eccles

The craft of the warrior.

Miyamoto Musashi

**Strategy process.** The series of interrelated decisions linking political ends with battlefield means. These include decisions concerning (in order) grand strategy, military strategy, operational strategy, and battlefield strategy.

Colonel Dennis M. Drew

Dr Donald M. Snow



**Suppression.** Temporary or transient degradation of the performance of a weapons system, below the level needed to fulfill its mission objectives, by an opposing force.

Joint Pub 1-02

**Suppression of enemy air defenses.** That activity which neutralizes, destroys, or temporarily degrades enemy air defenses in a specific area by physical attack and/or electronic warfare.

Joint Pub 1-02

**Surveillance.** The systematic observation of aerospace, surface or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means.

Joint Pub 1-02

**Survivability.** Capability of a system to accomplish its mission in the face of an unnatural (man-made) hostile, scenario-dependent environment. Survivability may be achieved by avoidance, hardness, proliferation, or reconstitution (or a combination).

AFM 11-1; AFR 80-38

**Sustainability.** The ability to maintain the necessary level and duration of operational activity to achieve military objectives. Sustainability is a function of providing for and maintaining those levels of ready forces, materiel, and consumables necessary to support military effort.

Joint Pub 1-02

The staying power to fight during and beyond an initial period of combat.

USAF Report to Congress, FY 1990

**Synchronization.** The arrangement of battlefield activities in time, space, and purpose to maximize combat power at the decisive point. It requires understanding the complementary and reinforcing effects of combining all available combat means, the ways in which friendly and enemy capabilities interact, mastery of space-time relationships, and unambiguous unity of purpose. The goal of synchronization is to use every asset where, when, and in the manner in which it will contribute most to superiority at the point of decision.

Raoul Henri Alcala

Putting all the available forces together at the correct place and time to achieve victory.

Colonel Frederick W. Timmerman, Jr.

The arrangement of military actions in time, space and purpose to produce maximum relative combat power at a decisive place and time.

Joint Pub 3-03 (Draft)

**Synergy.** A whole that is greater than the sum of its component parts.

**Tactical airlift.** The airlift that provides the immediate and responsive air movement and delivery of combat troops and supplies directly into objective areas through air landing, extraction, airdrop, or other delivery techniques; and the air logistic support of all theater forces, including those engaged in combat operations, to meet specific theater objectives and requirements (intertheater airlift).

AFM 11-1

**Tactical air support.** Air operations carried out in coordination with surface forces and which directly assist land or maritime operations.

Joint Pub 1-02

**Tactical air support of land operations (TASLO).** Those activities that are conducted to influence a land battle. These activities include the following basic air operations:

- a. Counterair
- b. Air Interdiction
- c. Offensive Air Support
- d. Tactical Air Support

NATO ATP-27 (B)

**Tactical air support of maritime operations (TASMO).** All tactical air operations performed in the maritime environment by non-organic land-based/shipborne aircraft to assist the Naval Commander in completing his mission.

NATO ATP-34 (A)

**Tactical level doctrine.** Tactical doctrine establishes detailed tactics, techniques and procedures that guide the use of specific weapons

systems to accomplish specific objectives. Tactical doctrine presents guidance for how specific aerospace forces should be employed in engagements and battles. It should address how to accomplish tactical objectives (such as blockading a harbor with aerial mines), and how combat conditions influence tactics, such as threat, weather, terrain, and available weapons, [i.e., B-52 low altitude night penetration for release of destructor (DST) mines]. Tactical doctrine is published in MAJCOM and Multi-Command (MCM) 3-series manuals.

AFR 1-2

**Tactical level of war.** The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives.

Joint Pub 1-02

**Tactics. 1.** The employment of units in combat. **2.** The ordered arrangement and maneuver of units in relation to each other and/or to the enemy in order to utilize their full potentialities.

Joint Pub 1-02

A continuous competition of wits.

Stefan T. Possony

The immediate employment of any force or weapon to attain the objectives of strategy, as opposed to its comprehensive control, which is strategy.

Rear Admiral Henry E. Eccles

**Tailoring.** Arranging the composition, balance, or configuration of forces so that they are specifically suited for a mission, theater of operations, or other specific criterion.

**Theater.** The geographical area outside the Continental United States for which a commander of a unified or specified command has been assigned military responsibility.

Joint Pub 1-02

**Theater airlift.** The movement of personnel and materiel by USAF aircraft which provides air movement and delivery of combat troops and supplies directly into objective areas through air-landing, extraction, airdrop, or other delivery techniques; also the use of air transport in direct support of airborne assault, carriage of air transported forces, resupply, and evacuation of casualties from forward airfields.

Joint Pub 3-01.4 (Draft)

Airlift provided for combat employment and aerial resupply of engaged forces in or near the battle area.

USAF Report to Congress, FY 1990

Sometimes called “tactical” or “intratheater” airlift. Moving people and things within a theater of operations. Specifically, theater airlift moves forces and equipment to their initial employment locations (deployment); it then moves forces around within the theater (employment), moves supplies and personnel (sustainment) and evacuates casualties (aeromedical evacuation).

Colonel Alexander P. Shine

**Theater of operations.** That portion of an area of war necessary for military operations and for the administration of such operations.

Joint Pub 1-02 definition of *area of operations*;

Joint Pub 3-10 (Initial Draft)

**Training.** Instruction to impart received knowledge, to provide answers to technical questions, and to acquaint students with correct solutions to specific problems.

Major General I. B. Holley, Jr.

(General Holley credited the definition to Phillip Crowl)

Repetitive practice of skills and procedures to assure mastery.

Doctrine for Professional Military Education,  
1988 (Draft)

What to think, as opposed to how to think.

Colonel Gene S. Bartlow

**Unconventional warfare.** A broad spectrum of military and paramilitary operations conducted in enemy-held, enemy-controlled or politically sensitive territory. Unconventional warfare includes,

but is not limited to, the interrelated fields of guerrilla warfare, evasion and escape, subversion, sabotage, and other operations of a low visibility, covert or clandestine nature.

Joint Pub 1-02 (definition abridged)

**Unified command.** A command with a broad continuing mission under a single commander and composed of significant assigned components of two or more Services, and which is established and so designated by the President, through the Secretary of Defense with the advice and assistance of the Joint Chiefs of Staff, or, when so authorized by the Joint Chiefs of Staff, by a commander of an existing unified command established by the President.

Joint Pub 1-02

**War.** Sustained use of armed force between nations or organized groups within a nation involving regular and irregular forces in a series of connected battles and campaigns to achieve vital national objectives. War may be limited, with some self-imposed restraints on resources or objectives. Or, it may be general with the total resources of a nation or nations employed and the national survival of a belligerent at stake.

Joint Test Pub 3-0

Essentially war is fighting, the only effective principle in the manifold activities generally designated as war.

General Carl von Clausewitz

The process by which a nation endeavors to impose its will on its opponent.

Air Marshal Arthur W. Tedder

As generally understood, armed conflicts on a fairly large scale, usually excluding conflict in which fewer than 50,000 combatants are involved.

*Encyclopaedia Britannica*, 15th Edition, 1988

A contest or difference between states or large bodies of people, which, not being determinable by the ordinary measures of justice and equity, is referred to the decision of the sword.

Colonel William Duane (1810)

# **Essays on Air and Space Power**

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